

What is claimed is:

1. A method of manufacturing a structured resistive material device comprising the steps of:
a) providing a substrate having a structured surface; b) disposing a layer of resistive material on the structured surface of the substrate; c) disposing a layer of conductive material on the resistive material layer; and d) separating the substrate from the resistive material layer to provide a structured resistive material to provide a resistive material device.
2. The method of claim 1 further comprising the step of providing a release layer disposed between the structured surface of the substrate and the resistive material layer.
3. The method of claim 1 wherein the structured surface is substantially corrugated.
4. The method claim 1 wherein the layer of resistive material is deposited on the surface of the substrate such that the resistive material layer is varied in thickness with the structures to form elongate structures.
5. A method of manufacturing a structured resistive material device comprising the steps of:
a) providing a conductive material layer having a structured surface; and b) disposing a layer of resistive material on the structured surface of the conductive material layer.
6. The method of claim 5 wherein the structured surface is a substantially corrugated surface.
7. The method of claim 5 wherein the layer of resistive material is deposited on the surface of the substrate such that the resistive material layer is varied in thickness with the structures to form elongate structures.
8. The method of claim 7, wherein the resistive material layer has peaks at the top of the elongate structures and troughs between the elongate structures, and the step of depositing a layer of resistive material further comprises depositing a first resistive material preferentially on the peaks, and a second resistive material preferentially in the troughs.
9. A resistive material device comprising a conductive material layer and a layer of resistive material disposed on the conductive layer wherein the resistive material layer is structured, wherein the resistive material layer has a first resistivity along a first axis, and a second resistivity along a second axis, the first resistivity being at least twice the value of the second resistivity.

10. The resistive material device of claim 9 wherein the resistive material layer is variable in thickness.
11. The resistive material device of claim 9 wherein the first resistivity is at least ten times the value of the second resistivity.
12. The resistive material device of claim 9 wherein the structured resistive material layer is substantially corrugated.
13. The resistive material device of claim 9 wherein structures of the structured resistive material layer are chosen from substantially rectangular in cross-section structures, substantially sinusoidal in cross-section structures, and substantially elongate discontinuous structures.
14. The resistive material device of claim 9 wherein structures of said structured resistive material layer are elongate and have a height to peak to peak ratio of greater than 0.5.
15. The resistive material device of claim 9 wherein the conductive layer forms a pair of conductive pads disposed at opposite ends of the resistive material layer, wherein the resistive material layer is structured.
16. An electronic device comprising one or more resistive material devices of claim 9.
17. A method of manufacturing a structured metal foil comprising the steps of electrodepositing a metal foil on a drum, the drum having a plurality of structures; and removing the metal foil from the drum, the metal foil having structures.
18. The method of claim 16 wherein the structures are disposed circumferentially or longitudinally on the drum.
19. A method of providing a structured drum suitable for forming a structured metal foil comprising the steps of disposing a photoresist on the surface of the drum, exposing the photoresist through a mask, developing the photoresist, etching the drum, and removing the remaining photoresist.